

From: [PETERSON Jenn L](#)
To: [Eric Blischke/R10/USEPA/US@EPA](#)
Cc: [rgensemer@parametrix.com](#); [Burt Shephard/R10/USEPA/US@EPA](#)
Subject: RE: Dioxin TRV - Fish
Date: 09/15/2008 01:31 PM

Thanks Eric, I will take a look. I think I calculated higher numbers based on sculpin, but I would have to pull it back up. The Round 3 fish are even higher in regards to the dioxin like congeners (esp. at OSM, RM 11E) - if I have time I could try and calculate TEQs for some of those fish. The issue is also the TRV because I believe the 90 pg/g number is high. DEQ's number is 6.4 pg/g based on an SSD using a different methodology, but regardless I think the 90 pg/g used in the Round 2 Report is at least two times too high. An SSD review would help resolve this problem.

-Jennifer

-----Original Message-----

From: Blischke.Eric@epamail.epa.gov
[mailto:Blischke.Eric@epamail.epa.gov]
Sent: Monday, September 15, 2008 1:05 PM
To: PETERSON Jenn L
Cc: rgensemer@parametrix.com; Shephard.Burt@epamail.epa.gov
Subject: RE: Dioxin TRV - Fish

Jennifer, I have calculated a TEC for the smallmouth bass sample with the highest 2,3,7,8-TCDD concentration. I have added the TEFs per the document you just provided. I wasn't sure how to handle the non-2,3,7,8 substituted congeners (e.g., tetrachlorodibenzofuran) and so just applied a TEF of zero. If you have a better number, please add it in.

You can see from the spreadsheet that the calculated TEC for the dioxin compounds is 8.2 pg/g. Unless I made a significant error here, this strongly suggests that we do not need a TRV for dioxin in fish tissue.,

Eric

(See attached file: RM7SMBDioxinTEC.xls)

"PETERSON Jenn L" <PETERSON.Jenn@ eq.state.or.us>	Eric Blischke/R10/USEPA/US@EPA	To
		cc
09/15/2008 11:41 AM		Subject
	RE: Dioxin TRV - Fish	

For an exposure point concentration, you sum dioxins and furans and dioxin like PCB congeners according to the attached document. Each congener is assigned a TEF that equates its toxicity to 2,3,7,8-TCDD. You then compare that exposure point concentration to the TRV for 2,3,7,8-TCDD. I think Query manager can do it if the Round 3 data is available. There were problems outlined earlier with the fish 2,3,7,8-TCDD TRV used in the Round 2 Report, which is why I would like one developed using SSD methodology.

-Jennifer

-----Original Message-----

From: Blischke.Eric@epamail.epa.gov
[mailto:Blischke.Eric@epamail.epa.gov]
Sent: Monday, September 15, 2008 11:21 AM
To: PETERSON Jenn L
Cc: ANDERSON Jim M; Shephard.Burt@epamail.epa.gov; Jeremy_Buck@fws.gov;
rgensemer@parametrix.com; Robert Neely
Subject: RE: Dioxin TRV - Fish

We have been through this before. How do you do that?

Eric

"PETERSON Jenn L" <PETERSON.Jenn@ eq.state.or.us>	Eric Blischke/R10/USEPA/US@EPA	To
		cc
09/15/2008 10:40	"ANDERSON Jim M"	

AM <ANDERSON.Jim@deg.state.or.us>, Burt Shephard/R10/USEPA/US@EPA, <Jeremy_Buck@fws.gov>, "Robert Neely" <Robert.Neely@noaa.gov>, <rgensemer@parametrix.com>
Subject
RE: Dioxin TRV - Fish

You have to calculate a dioxin TEQ for fish. The TCDD screen does not answer the question.

-Jennifer

-----Original Message-----
From: Blischke.Eric@epamail.epa.gov
[mailto:Blischke.Eric@epamail.epa.gov]
Sent: Monday, September 15, 2008 10:11 AM
To: PETERSON Jenn L
Cc: ANDERSON Jim M; Shephard.Burt@epamail.epa.gov; Jeremy_Buck@fws.gov; Robert Neely; rgensemer@parametrix.com
Subject: Re: Dioxin TRV - Fish

Jennifer, we went with the 90 pg/g screening criteria for 2,3,7,8-TCDD. We did not look at other dioxin congeners. Based on this screening step, only one sample - a lumbriculus sample collected offshore of the RPAC outfall - exceeds this criteria. As a result, we did not develop TRVs for dioxin.

I just performed a 2,3,7,8-TCDD screen for all tissue data (including Round 3B) collected at Portland Harbor. The highest 2,3,7,8-TCDD fish tissue concentration was a Round 1 smallmouth bass sample collected in the vicinity of RM 7 at 1.49 pg/g (ng/kg).

Burt and Bob, is my recollection accurate?

Eric

"PETERSON Jenn L"
<PETERSON.Jenn@deg.state.or.us>
09/15/2008 08:59 AM
To
Eric Blischke/R10/USEPA/US@EPA, Burt Shephard/R10/USEPA/US@EPA
cc
"ANDERSON Jim M" <ANDERSON.Jim@deg.state.or.us>, "Robert Neely" <Robert.Neely@noaa.gov>, <Jeremy_Buck@fws.gov>
Subject
Dioxin TRV - Fish

What was the decision on the development of a dioxin TRV for fish? Was the Round 3 Data screened for dioxin TEQ?

-Jennifer

[attachment "DioxinTEQ_Methods_EPAJune2008.pdf" deleted by Eric Blischke/R10/USEPA/US]